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=> d stat que
L1 510 SEA FILE=REGISTRY OUTER MEMBRANE PROTEIN?/CN
L2 30 SEA FILE=REGISTRY NUCLEIC ACID?/CN
L3 98 SEA FILE=REGISTRY ANTIBOD?/CN
L5 1 SEA FILE=REGISTRY ANTIBOD?(L) POLYCLONAL?
L6 521 SEA FILE=REGISTRY ("CHLAMYDIA TRACHOMATIS MAJOR OUTER MEMBRANE PROTEIN FRAGMENT"/CN OR "CHLAMYDIA TRACHOMATIS MJOR OUTER MEMBRANE PROTEIN HELPER T CELL EPITOPE"/CN) OR L1
L7 4972 SEA FILE=REGISTRY CHLAMYDIA(L) PNEUMONIAE NOT L6
L8 7910 SEA FILE=HCAPLUS L6 OR (OUTER(W) MEMBRANE?) (5A) PROTEIN? OR OMP
L9 25882 SEA FILE=HCAPLUS L7 OR CHLAMYDIA OR PNEUMONI?
L10 658 SEA FILE=HCAPLUS L8(L) L9
L11 621758 SEA FILE=HCAPLUS L5 OR ANTIBOD? OR L3 OR POLYCLONAL OR PAB# OR MAB# OR AB# OR MONOCLONAL
L13 309 SEA FILE=HCAPLUS L10 AND L11
L14 112454 SEA FILE=HCAPLUS NUCLEIC(W) ACID? OR L2
L15 26 SEA FILE=HCAPLUS L13 AND L14

=> d ibib abs hitrn l15 1-26

L15 ANSWER 1 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:598462 HCAPLUS
DOCUMENT NUMBER: 135:177709
TITLE: Treatment and diagnosis of Alzheimer's disease with anti-Chlamydia pneumoniae agents

M. Smith 308-3278

INVENTOR(S): Balin, Brian J.; Abrams, J. Todd; Hudson, Alan P.;
Whittum-Hudson, Judith A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 42 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001014670	A1	20010816	US 1999-227749	19990108
			US 1998-70855	P 19980109

PRIORITY APPLN. INFO.:
AB The invention relates to a method of treating Alzheimer's disease in a mammal comprising administering to the mammal an anti-microbial agent having anti-Chlamydia pneumoniae activity. The invention also relates to a method of diagnosing Alzheimer's disease in a mammal comprising measuring the serum anti-Chlamydia pneumoniae **antibody** titer in a patient suspected of having Alzheimer's disease (AD). Immunohistochem. anal. of tissues from affected regions of AD brains and congruent regions from non-AD control brains was performed to identify specific area(s) and host cell types within which the bacterium resides. Immunohistochem. anal. confirmed the presence of C. pneumoniae in affected AD brain regions and localized the bacterium to non-neuronal cells. At least three cell types, astroglia, microglia, and pericytes, were shown to harbor C. pneumoniae in the AD brain.

L15 ANSWER 2 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:507733 HCAPLUS
DOCUMENT NUMBER: 135:103459
TITLE: Sequence of novel Actinobacillus pleuropneumoniae outer membrane protein fragment, and therapeutic and diagnostic uses thereof
INVENTOR(S): Haesebrouck, Freddy; Ducatelle, Richard; Chiers, Koen; Van Overbeke, Ingrid
PATENT ASSIGNEE(S): Universiteit Gent, Belg.
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001049722	A2	20010712	WO 2000-EP13305	20001228
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,			

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1113074 A1 20010704 EP 1999-204612 19991230
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: EP 1999-204612 A 19991230
US 2000-176120 P 20000114

AB The invention provides the N-terminal amino acid sequence of a novel Actinobacillus pleuropneumoniae (A. plpn) outer membrane protein. The protein of the invention has a mol. wt. of about 55 kDa and is involved in adhesion of A. plpn to swine alveolar epithelial cells. The invention also provides immunogenic fragments of the outer membrane protein. The invention further provides **nucleic acids** encoding said proteins, and the use of both types of mols. for the diagnosis, treatment, and prevention of pleuropneumoniae infections in pigs is also within the scope of the invention.

L15 ANSWER 3 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:488672 HCAPLUS
DOCUMENT NUMBER: 135:91518
TITLE: Actinobacillus pleuropneumoniae outer membrane protein and its use
INVENTOR(S): Haesebrouck, Freddy; Ducatelle, Richard; Chiers, Koen; Van Overbeke, Ingrid
PATENT ASSIGNEE(S): Universiteit Gent, Belg.
SOURCE: Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1113074	A1	20010704	EP 1999-204612	19991230
R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO		
WO 2001049722	A2	20010712	WO 2000-EP13305	20001228
W:		AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
RW:		GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		

PRIORITY APPLN. INFO.: EP 1999-204612 A 19991230
US 2000-176120 P 20000114

AB The present invention relates to a new purified immunogenic Actinobacillus pleuropneumoniae outer membrane protein of mol. wt. of about 55 kDa and having an N-terminal sequence. The invention also relates to **nucleic acids** encoding said protein and the use of both types of mols. for the treatment and prevention of pleuropneumonia

infections in pigs. The present invention also relates to the combined use of a recombinant *Actinobacillus pleuropneumoniae* vaccine strain for use in vaccination, and a polypeptide for use in a diagnostic method.

L15 ANSWER 4 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:472750 HCAPLUS

DOCUMENT NUMBER: 135:75735

TITLE: **Chlamydia outer membrane protein** and corresponding DNA fragments and uses thereof

INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela

PATENT ASSIGNEE(S): Aventis Pasteur Ltd., Can.

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001046225	A2	20010628	WO 2000-CA1535	20001220

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 1999-171539 P 19991222

PRIORITY APPLN. INFO.:

AB The present invention provides a method of **nucleic acid**, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically **C. pneumoniae**, employing a vector contg. a nucleotide sequence encoding an **outer membrane protein** of a strain of **Chlamydia pneumoniae** and a promoter to effect expression of the **outer membrane protein** in the host. Modifications are possible within the scope of this invention.

IT 223702-08-7

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; recombinant **Chlamydia pneumoniae outer membrane protein** and gene for diagnosis, prevention and treatment of **Chlamydia** infection)

IT 346742-56-1

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(nucleotide sequence; recombinant **Chlamydia pneumoniae outer membrane protein**)

and gene for diagnosis, prevention and treatment of **Chlamydia** infection)

L15 ANSWER 5 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:472749 HCAPLUS

DOCUMENT NUMBER: 135:75734

TITLE: **Chlamydia omp** P6 precursor protein and corresponding DNA fragments and uses thereof

INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela

PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.

SOURCE: PCT Int. Appl., 74 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001046224	A2	20010628	WO 2000-CA1534	20001220
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: US 1999-171525 P 19991222

AB The present invention provides a method of **nucleic acid**, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. **pneumoniae**, employing a vector contg. a nucleotide sequence encoding an **omp** P6 precursor of a strain of **Chlamydia pneumoniae** and a promoter to effect expression of the **omp** P6 precursor in the host. Modifications are possible within the scope of this invention.

IT 223708-41-6P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amino acid sequence; recombinant **Chlamydia pneumoniae omp** P6 precursor protein and gene for diagnosis and treatment of **Chlamydia** infection)

IT 346741-64-8P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(nucleotide sequence; recombinant **Chlamydia pneumoniae omp** P6 precursor protein and gene for diagnosis and treatment of **Chlamydia** infection)

L15 ANSWER 6 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:255245 HCAPLUS

DOCUMENT NUMBER: 134:265146

TITLE: Cloning and characterization of outer membrane protein OMP106 gene of Moraxella catarrhalis and its prophylactic, diagnostic and therapeutic uses

INVENTOR(S): Tucker, Kenneth; Plosila, Laura; Tillman, Ulrich F.

PATENT ASSIGNEE(S): Antex Biologics Inc., USA

SOURCE: U.S., 49 pp., Cont.-in-part of U.S. Ser. No. 642,712.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6214981	B1	20010410	US 1997-968685	19971112
CN 1223549	A	19990721	CN 1997-195990	19970428
			US 1996-642712	A2 19960503

PRIORITY APPLN. INFO.:

AB The invention discloses the Moraxella catarrhalis outer membrane protein-106 (OMP106) polypeptide, polypeptides derived therefrom (OMP106-derived polypeptides), nucleotide sequences encoding these polypeptides, and **antibodies** that specifically bind the OMP106 polypeptide and/or OMP106-derived polypeptides. Also disclosed are immunogenic, prophylactic or therapeutic compns., including vaccines, comprising OMP106 polypeptide and/or OMP106-derived polypeptides. The invention addnl. discloses methods of inducing immune responses to M. catarrhalis and M. catarrhalis OMP106 polypeptides and OMP106-derived polypeptides in animals.

REFERENCE COUNT: 21

REFERENCE(S): (1) Aebi; Infection & Immunity 1997, V65, P4367 HCAPLUS
(2) Anon; WO 9634960 1996 HCAPLUS
(3) Bartos; J Infect Dis 1988, V158, P761 HCAPLUS
(4) Bogosian; Gene 1993, V133, P17 HCAPLUS
(5) Helminen; Infect Immun 1993, V61, P2003 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 7 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:229055 HCAPLUS

DOCUMENT NUMBER: 134:251203

TITLE: Cloning and expression of serine-threonine kinase (STK) gene of Chlamydia for immunization against infections

INVENTOR(S): Brunham, Robert C.

PATENT ASSIGNEE(S): University of Manitoba, Can.

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021811	A1	20010329	WO 2000-CA1097	20000921

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-401780 A 19990922

AB **Nucleic acid**, including DNA, immunization is used to generate a protective immune response in a host, including humans, to a serine-threonine kinase (STK) of a strain of Chlamydia. A non-replicating vector, including a plasmid vector, contains a nucleotide sequence encoding an STK or a fragment of the STK that generates **antibodies** that specifically react with STK and a promoter sequence operatively coupled to the first nucleotide sequence for expression of the STK in the host. The non-replicating vector may be formulated with a pharmaceutically-acceptable carrier for in vivo administration to the host.

REFERENCE COUNT: 3

REFERENCE(S): (1) Holzman, L; JOURNAL OF BIOLOGICAL CHEMISTRY 1994, V269(49), P30808 HCAPLUS
(2) Stephens, R; SCIENCE 1998, V282(5389), P754 HCAPLUS
(3) Univ Manitoba; WO 9802546 A 1998 HCAPLUS

L15 ANSWER 8 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:229049 HCAPLUS

DOCUMENT NUMBER: 134:248622

TITLE: Sequences of **Chlamydia pneumoniae** outer membrane protein

OMP, and their diagnostic and therapeutic uses
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela

PATENT ASSIGNEE(S): Aventis Pasteur Limited, Can.

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021804	A1	20010329	WO 2000-CA1088	20000915

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,

YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-154652 P 19990920

AB The invention provides protein and DNA sequences of full-length
outer membrane protein OMP of
Chlamydia pneumoniae. The present invention also
relates to immunization of a host, including humans, against disease
caused by infection by a strain of **Chlamydia**, specifically **C.**
pneumoniae, employing a vector contg. a **Chlamydia**
protein gene and a promoter to effect expression of the **outer**
membrane protein OMP gene in the host.

IT 223708-74-5P
RL: BAC (Biological activity or effector, except adverse); BOC (Biological
occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP
(Preparation); USES (Uses)

(amino acid sequence; sequences of **Chlamydia**
pneumoniae **outer membrane protein**
OMP, and their diagnostic and therapeutic uses)

IT 331286-16-9
RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(nucleotide sequence; sequences of **Chlamydia**
pneumoniae **outer membrane protein**
OMP, and their diagnostic and therapeutic uses)

REFERENCE COUNT: 2

REFERENCE(S): (1) Genset Sa; WO 9927105 A 1999 HCAPLUS
(2) Madsen, A; WO 9858953 A 1998 HCAPLUS

L15 ANSWER 9 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:691928 HCAPLUS

DOCUMENT NUMBER: 135:902

TITLE: Chlamydia pneumoniae DNA in non-coronary
atherosclerotic plaques and circulating leukocytes
AUTHOR(S): Berger, Mario; Schroder, Babette; Daeschlein, Georg;
Schneider, Wolfgang; Busjahn, Andreas; Buchwalow,
Igor; Luft, Friedrich C.; Haller, Hermann
CORPORATE SOURCE: Franz Volhard Clinic and Max Delbruck Center for
Molecular Medicine, Humboldt University, Berlin,
13122, Germany

SOURCE: J. Lab. Clin. Med. (2000), 136(3), 194-200
CODEN: JLCMAK; ISSN: 0022-2143

PUBLISHER: Mosby, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Earlier studies have assocd. atherosclerosis with **Chlamydia**
pneumoniae infection. **C. pneumoniae** may circulate via
monocytes and migrate into plaques by leukocyte infiltration; however,
detection is difficult. We developed a novel polymerase chain reaction
(PCR) method to test the hypothesis that **C. pneumoniae** DNA in
circulating leukocytes is correlated with **C. pneumoniae** DNA in
plaque material and that **C. pneumoniae** copy no. is assocd. with

disease severity. We obtained plaques from 130 patients who underwent surgery for carotid stenosis, aneurysm, or peripheral vascular disease. From 60 patients and 51 normal control subjects we also obtained circulating leukocytes. The *C. pneumoniae* 16 S rRNA gene was amplified with a highly specific quant. PCR protocol relying on the TaqMan technol. Immunohistochem. was performed with antibody against the *C. pneumoniae* outer membrane protein. *C. pneumoniae* DNA was present in 25% of atherosclerotic plaques and 20% of circulating leukocytes from patients. The copy no. was not correlated with disease severity. *C. pneumoniae* DNA was more common in younger patients and smokers. *C. pneumoniae* antibody titers, C-reactive protein, fibrinogen, leukocyte count, cholesterol, and diabetes were not assocd. with *C. pneumoniae* DNA. Although immunostaining of plaque and PCR results were highly correlated, we found no relationship between *C. pneumoniae* DNA in plaques and that in circulating leukocytes. Finally, 13% of normal control subjects had pos. leukocytes; however, their copy no. was significantly lower than that of the patients. *C. pneumoniae* DNA is frequent in atherosclerotic plaques and is correlated with pos. immunohistochem. *C. pneumoniae* DNA may also be found in circulating leukocytes; however, infected leukocytes and plaques do not coincide. Serol. is unreliable in predicting *C. pneumoniae* DNA. Smoking increases the risk of harboring *C. pneumoniae* DNA. Our results do not suggest that either test for antibodies or *C. pneumoniae* DNA from leukocytes in blood is of value in predicting infected plaques.

REFERENCE COUNT: 35
REFERENCE(S): (1) Airene, S; Infect Immun 1999, V67, P1445 HCAPLUS
(2) Airene, S; Infect Immun 1999, V67, P1445 HCAPLUS
(3) Black, C; Eur J Clin Microbiol Infect Dis 1994, V13, P752 HCAPLUS
(5) Campbell, L; J Clin Microbiol 1992, V30, P434 HCAPLUS
(8) Gaydos, C; Infect Immun 1996, V64, P1614 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 10 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:457095 HCAPLUS
DOCUMENT NUMBER: 133:88218
TITLE: Chlamydia antigens and corresponding DNA fragments and uses thereof
INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe
PATENT ASSIGNEE(S): Connaught Laboratories Ltd., Can.
SOURCE: PCT Int. Appl., 215 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039158	A1	20000706	WO 1999-CA1230	19991223
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,				

CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1140999 A1 20011010 EP 1999-962008 19991223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1998-113280 P 19981223
US 1998-113281 P 19981223
US 1998-113282 P 19981223
US 1998-113283 P 19981223
US 1998-113284 P 19981223
US 1998-113285 P 19981223
US 1998-113385 P 19981223
US 1998-114050 P 19981228
US 1998-114056 P 19981228
US 1998-114057 P 19981228
US 1998-114058 P 19981228
US 1998-114059 P 19981228
US 1998-114061 P 19981228
WO 1999-CA1230 W 19991223

AB The present invention provides purified and isolated polynucleotide mols. that encode Chlamydia polypeptides which can be used in methods to prevent, treat, and diagnose Chlamydia infection. In one form of the invention, the polynucleotide mols. are selected from DNA that encode polypeptides CPN100686 RY 54 (SEQ ID Nos: 1 and 14), CPN100696 RY-55 (SEQ ID Nos: 2 and 15), CPN100709 RY-57 (SEQ ID Nos: 3 and 16), CPN100710 RY-58 (SEQ ID Nos: 4 and 17), CPN100711 RY-59 (SEQ ID Nos: 5 and 18), CPN100877 RY-61 (SEQ ID Nos: 6 and 19), CPN100325 RY-62 (SEQ ID Nos: 7 and 20), CPN100368 RY-63 (SEQ ID Nos: 8 and 21), CPN100624 RY-64 (SEQ ID Nos: 9 and 22), CPN100633 RY-65 (SEQ ID Nos: 10 and 23), CPN100985 RY-66 (SEQ ID Nos: 11 and 24), CPN100987 RY-67 (SEQ ID Nos: 12 and 25) and CPN100988 RY-68 (SEQ ID Nos: 13 and 26).

IT 281237-29-4 281237-32-9 281237-33-0

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)

(amino acid sequence; Chlamydia antigens, corresponding DNA
fragments, and use as vaccine or for diagnosis and therapy)

REFERENCE COUNT: 8

REFERENCE(S):

- (1) Griffais, R; WO 9927105 A 1999 HCAPLUS
- (3) Hitachi Chemical Co Ltd; EP 0784059 A 1997 HCAPLUS
- (4) Kalman; NATURE GENETICS 1999, V21, P385 HCAPLUS
- (5) Melgosa, M; INFECTION AND IMMUNITY 1991, V59(6), P2195 HCAPLUS
- (6) Melgosa, M; INFECTION AND IMMUNITY 1994, V62(3), P880 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 11 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:457094 HCAPLUS

M. Smith 308-3278

DOCUMENT NUMBER: 133:88217
 TITLE: Chlamydia antigens and corresponding DNA fragments and uses thereof
 INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
 PATENT ASSIGNEE(S): Connaught Laboratories Ltd., Can.
 SOURCE: PCT Int. Appl., 81 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039157	A1	20000706	WO 1999-CA1224	19991222
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1140998	A1	20011010	EP 1999-960752	19991222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			US 1998-114060	P 19981228
			US 1999-123967	P 19990312
			US 1999-141271	P 19990630
			WO 1999-CA1224	W 19991222
AB The present invention provides a method of nucleic acid , including DNA, immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia, specifically C. pneumoniae, employing a vector contg. a nucleotide sequence encoding an ATP/ADP translocase of a strain of Chlamydia pneumoniae and a promoter to effect expression of the ATP/ADP translocase gene in the host. Modifications are possible within the scope of this invention.				
REFERENCE COUNT:			6	
REFERENCE(S):			(1) Griffais, R; WO 9927105 A 1999 HCAPLUS (2) Hatch, T; JOURNAL OF BACTERIOLOGY 1982, V150(2), P662 HCAPLUS (3) Kalman; NATURE GENETICS 1999, V21, P385 HCAPLUS (4) Stephens; SCIENCE 1998, V282, P754 HCAPLUS (5) Tjaden; J BACTERIOL 1999, V181(4), P1196 HCAPLUS ALL CITATIONS AVAILABLE IN THE RE FORMAT	

L15 ANSWER 12 OF 26 HCAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 2000:441819 HCAPLUS
 DOCUMENT NUMBER: 133:72938
 TITLE: Chlamydia trachomatis antigens
 INVENTOR(S): Ratti, Giulio
 PATENT ASSIGNEE(S): Chiron S.p.A., Italy

SOURCE: PCT Int. Appl., 25 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000037494	A2	20000629	WO 1999-IB2065	19991217
WO 2000037494	A3	20001012		
W: CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1140997	A2	20011010	EP 1999-958455	19991217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:				
		GB 1998-28000	A	19981218
		WO 1999-IB2065	W	19991217

AB Proteins encoded by Chlamydia trachomatis which are immunogenic in humans as a consequence of infection have been identified using Western blots of two-dimensional electrophoretic maps. Several known immunogens were identified, as were proteins not previously known to be immunogens, and proteins not previously reported as expressed gene products.

L15 ANSWER 13 OF 26 HCAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 2000:384432 HCAPLUS
 DOCUMENT NUMBER: 133:29606
 TITLE: A Chlamydia pneumoniae 98kDa outer membrane protein and gene sequences, and uses for immunization and diagnosis
 INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe; Dunn, Pamela
 PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.
 SOURCE: PCT Int. Appl., 98 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032784	A1	20000608	WO 1999-CA1148	19991201
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

AU 2000037909 A5 20000619 AU 2000-37909 19991201
EP 1135501 A1 20010926 EP 1999-957786 19991201

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1998-110439 P 19981201
US 1999-132272 P 19990503
WO 1999-CA1148 W 19991201

AB The invention provides sequences of a **Chlamydia pneumoniae** 98kDa putative **outer membrane protein (OMP)** CPN100640 and corresponding DNA which can be used in methods to prevent, treat, and diagnose **Chlamydia** infections in mammals, including humans. In particular, a vaccine vector encoding **OMP** or an **OMP/signal peptide fusion protein** is provided as is its use in immunization against **Chlamydia**. Probes/primers and **antibodies** for diagnostic use are also provided. BALB/C mice vaccinated with an expression vector for **OMP** antigen showed increased resistance to challenge with **C. pneumoniae**.

IT 223704-49-2P 273949-20-5P

RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; **Chlamydia pneumoniae** 98kDa **outer membrane protein** and gene sequences, and uses for immunization and diagnosis)

IT 273949-18-1 273949-19-2

RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(nucleotide sequence; **Chlamydia pneumoniae** 98kDa **outer membrane protein** and gene sequences, and uses for immunization and diagnosis)

REFERENCE COUNT: 9

REFERENCE(S): (1) Griffais, R; WO 9927105 A 1999 HCAPLUS
(2) Halme, S; IMMUNOLOGY 1997, V45(4), P378 HCAPLUS
(3) Hitachi Chemical Co Ltd; EP 0784059 A 1997 HCAPLUS
(6) Knudsen; INFECTION AND IMMUNITY 1999, V67(1), P375 HCAPLUS
(7) Madsen, A; WO 9858953 A 1998 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 14 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:314718 HCAPLUS

DOCUMENT NUMBER: 132:333380

TITLE: Sequences of a **Chlamydia pneumoniae** 98kDa putative **outer membrane protein**, and uses thereof in diagnostic and therapeutic applications

INVENTOR(S): Murdin, Andrew David; Oomen, Raymond Peter; Dunn, Pamela Lesley

PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

M. Smith 308-3278

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000026237	A2	20000511	WO 1999-GB3579	19991029
WO 2000026237	A3	20000921		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1124849	A2	20010822	EP 1999-954095	19991029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			US 1998-106070	P 19981029
			US 1999-122066	P 19990301
			US 1999-428122	A 19991027
			WO 1999-GB3579	W 19991029

AB The invention provides sequences of a **Chlamydia pneumoniae** 98kDa putative **outer membrane protein (OMP)** which can be used in methods to prevent, treat, and diagnose **Chlamydia** infections. In particular, a vaccine vector encoding **OMP** or an **OMP/signal peptide** fusion protein is provided as is its use in immunization against **Chlamydia**. Probes/primers for diagnostic use are also provided.

IT **268534-00-5P**
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; sequences of a **Chlamydia pneumoniae** 98kDa putative **outer membrane protein**, and uses thereof in diagnostic and therapeutic applications)

IT **268533-95-5**
RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(nucleotide sequence; sequences of a **Chlamydia pneumoniae** 98kDa putative **outer membrane protein**, and uses thereof in diagnostic and therapeutic applications)

L15 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:291251 HCAPLUS
DOCUMENT NUMBER: 132:307251
TITLE: **Chlamydia pneumoniae** 98-kDa **outer membrane protein** and corresponding DNA and use for vaccine immunization
INVENTOR(S): Murdin, Andrew David; Oomen, Raymond Peter; Dunn,

PATENT ASSIGNEE(S): Pamela Lesley
 SOURCE: Connaught Laboratories Limited, Can.
 PCT Int. Appl., 101 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000024902	A1	20000504	WO 1999-GB3571	19991028
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9963598	A1	20000515	AU 1999-63598	19991028
EP 1124965	A1	20010822	EP 1999-951023	19991028
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.:
 US 1998-106046 P 19981028
 US 1999-132271 P 19990503
 US 1999-427533 A 19991026
 WO 1999-GB3571 W 19991028

AB The present invention provides a method of **nucleic acid**, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of **Chlamydia**, specifically C. **pneumoniae**, employing a vector, contg. a nucleotide sequence encoding a 98-kDa **outer membrane protein** of a strain of **Chlamydia pneumoniae** and a promoter to effect expression of the gene in the host. Modifications are possible within the scope of this invention.

IT 265294-96-0P

RL: PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (amino acid sequence; **Chlamydia pneumoniae** 98-kDa **outer membrane protein** and corresponding DNA and use for vaccine immunization)

IT 265294-95-9

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (nucleotide sequence; **Chlamydia pneumoniae** 98-kDa **outer membrane protein** and corresponding DNA and use for vaccine immunization)

REFERENCE COUNT: 10

REFERENCE(S):
 (2) Griffais, R; WO 9927105 A 1999 HCAPLUS
 (3) Halme, S; SCANDINAVIAN JOURNAL OF IMMUNOLOGY 1997, V45(4), P378 HCAPLUS
 (4) Hatichi Chemical Co Ltd; EP 0784059 A 1997 HCAPLUS

(6) Madsen, A; WO 9858953 A 1998 HCAPLUS
(9) Stephens, R; SCIENCE 1998, V282(5389), P754
HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 16 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:227773 HCAPLUS

DOCUMENT NUMBER: 132:250005

TITLE: Antigenic outer membrane protein OMP21 of Moraxella

catarrhalis and the gene encoding it and their
prophylactic, diagnostic and therapeutic uses

INVENTOR(S): Tucker, Kenneth; Tillmann, Ulrich F.

PATENT ASSIGNEE(S): Antex Biologics Inc., USA

SOURCE: PCT Int. Appl., 109 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000018910	A1	20000406	WO 1999-US22918	19991001
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9964100	A1	20000417	AU 1999-64100	19991001
EP 1117779	A1	20010725	EP 1999-951716	19991001
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

PRIORITY APPLN. INFO.: US 1998-164714 A 19981001
WO 1999-US22918 W 19991001

AB The invention discloses the Moraxella catarrhalis outer membrane protein polypeptide and polypeptides derived therefrom (collectively "OMP21"), nucleotide sequences encoding said OMP21, and **antibodies** that specifically bind OMP21. Also disclosed are pharmaceutical compns. including prophylactic or therapeutic compns., which may be immunogenic compns. including vaccines, comprising OMP21, **antibodies** thereto or nucleotides encoding same. The invention addnl. discloses methods of inducing an immune response to M. catarrhalis and OMP21 in an animal, preferably a human, methods of treating and methods of diagnosing Moraxella infections in an animal, preferably a human, and kits therefor. The outer membrane proteins of several strains of M. catarrhalis were extd. with non-denaturing detergents (octyl glucoside or EmpigenBB.RTM.) and fractionated on SDS-polyacrylamide gels followed by transfer to PVDF membranes for N-terminal sequencing. The protein was antigenic in rabbits and conserved between strains of M. catarrhalis and related bacteria. Antisera to the protein mediated complement killing of M. catarrhalis.

The gene, omp21, was cloned by PCR with degenerate primers and a knockout mutation created. The knockout strain showed weaker binding to cultured nasopharyngeal cells than did the wild type.

REFERENCE COUNT: 1
REFERENCE(S): (1) Harkness; WO 9612733 A1 1996 HCAPLUS

L15 ANSWER 17 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:98784 HCAPLUS

DOCUMENT NUMBER: 132:147637

TITLE: Protein and DNA sequences encoding a **Chlamydia pneumoniae outer membrane**

protein (designated CPN100314), and uses thereof in vaccines and diagnostic assays

INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Dunn, Pamela L.

PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006743	A2	20000210	WO 1999-IB1333	19990727
WO 2000006743	A3	20000504		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9947934	A1	20000221	AU 1999-47934	19990727
EP 1108033	A2	20010620	EP 1999-931399	19990727
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			

PRIORITY APPLN. INFO.:
US 1998-94203 P 19980727
US 1999-122045 P 19990301
US 1999-360434 A 19990726
WO 1999-IB1333 W 19990727

AB This invention provides protein and DNA sequences encoding a **Chlamydia pneumoniae outer membrane protein**, designated CPN100314. The invention also provides for the use of the disclosed protein/gene in vaccines against **Chlamydia**. Thus, the invention discloses a vector contg. a nucleotide sequence (gene **omp**) encoding CPN100314 operably linked to a promoter to effect expression of CPN100314 in the host. The invention also provides for the use of the CPN100314 protein/gene in diagnostic assays for **Chlamydia** infection.

IT 257598-92-8P 257598-93-9P

RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU

(Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; protein and DNA sequences encoding a
**Chlamydia pneumoniae outer membrane
protein** (designated CPN100314), and uses thereof in vaccines
and diagnostic assays)

IT 257598-91-7

RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(nucleotide sequence; protein and DNA sequences encoding a
**Chlamydia pneumoniae outer membrane
protein** (designated CPN100314), and uses thereof in vaccines
and diagnostic assays)

L15 ANSWER 18 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:98781 HCAPLUS

DOCUMENT NUMBER: 132:147635

TITLE: Protein and DNA sequences encoding a **Chlamydia
pneumoniae outer membrane**

protein (designated CPN100501), and uses
thereof in vaccines and diagnostic assays

INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Dunn, Pamela L.

PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006741	A1	20000210	WO 1999-IB1330	19990727
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9947931	A1	20000221	AU 1999-47931	19990727
EP 1100919	A1	20010523	EP 1999-931396	19990727
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
PRIORITY APPLN. INFO.:			US 1998-94192	P 19980727
			US 1999-122044	P 19990301
			US 1999-361440	A2 19990726
			WO 1999-IB1330	W 19990727

AB This invention provides protein and DNA sequences encoding a
**Chlamydia pneumoniae outer membrane
protein**, designated CPN100501. The invention also provides for
the use of the disclosed protein/gene in vaccines against
Chlamydia. Thus, the invention discloses a vector contg. a

nucleotide sequence (gene mip) encoding CPN100501 operably linked to a promoter to effect expression of CPN100501 in the host. The invention also provides for the use of the CPN100501 protein/gene in diagnostic assays for **Chlamydia** infection.

IT 223705-65-5P 257598-95-1P

RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(amino acid sequence; protein and DNA sequences encoding a

Chlamydia pneumoniae outer membrane

protein (designated CPN100501), and uses thereof in vaccines and diagnostic assays)

IT 257598-94-0

RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(nucleotide sequence; protein and DNA sequences encoding a

Chlamydia pneumoniae outer membrane

protein (designated CPN100501), and uses thereof in vaccines and diagnostic assays)

REFERENCE COUNT: 7

REFERENCE(S):

- (1) Griffais Remy; WO 9927105 A 1999 HCAPLUS
- (2) Hitachi Chemical Co Ltd; EP 0784059 A 1997 HCAPLUS
- (4) Kalman, S; NATURE GENETICS 1999, V21, P385 HCAPLUS
- (5) Lundemose, A; MOLECULAR MICROBIOLOGY 1992, V6(17), P2539 HCAPLUS
- (6) Melgosa, M; FEMS MICROBIOLOGY LETTERS 1993, V112, P199 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 19 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:244557 HCAPLUS

DOCUMENT NUMBER: 130:277672

TITLE: Chlamydia high-molecular-weight protein and its gene sequence and and diagnostic and therapeutic uses

INVENTOR(S): Jackson, James W.; Pace, John L.

PATENT ASSIGNEE(S): Antex Biologics Inc., USA

SOURCE: PCT Int. Appl., 141 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917741	A1	19990415	WO 1998-US20737	19981001
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

AU 9895988 A1 19990427 AU 1998-95988 19981001
EP 1019028 A1 20000719 EP 1998-949723 19981001
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

BR 9813841 A 20001003 BR 1998-13841 19981001
ZA 9809012 A 19990412 ZA 1998-9012 19981002

PRIORITY APPLN. INFO.:

US 1997-942596 A 19971002
WO 1998-US20737 W 19981001

AB A high-mol.-wt. (HMW) protein of Chlamydia, the amino acid sequence thereof, and **antibodies** that specifically bind the HMW protein are disclosed as well as the **nucleic acid** sequence encoding the same. The gene encoding HMW protein was cloned and sequenced from C. trachomatis strains L2, B, and F. The in vitro neutralization model shows that protective antiserum against HMW protein inhibits chlamydial infections of various tissue culture cell lines. Vaccine compns. comprising the HMW protein are effective in a mouse model of salpingitis and fertility. Thus, disclosed are prophylactic and therapeutic compns., comprising the HMW protein, a fragment thereof, or an **antibody** that specifically binds the HMW protein or a portion thereof, or the nucleotide sequence encoding the HMW protein or a fragment thereof, including vaccines.

REFERENCE COUNT: 4

REFERENCE(S):

- (1) Caldwell; US 4427782 A 1984 HCAPLUS
- (2) Daniels; US 5725863 A 1998 HCAPLUS
- (3) Morrison; US 5071962 A 1991 HCAPLUS
- (4) Urnovitz; US 5516638 A 1996 HCAPLUS

L15 ANSWER 20 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:27851 HCAPLUS

DOCUMENT NUMBER: 130:92748

TITLE:

Outer membrane proteins
of *Chlamydia pneumoniae* and the
genes encoding them and their diagnostic and
therapeutic uses

INVENTOR(S):

Birkelund, Svend; Christiansen, Gunna; Knudsen,
Katrine; Madsen, Anna-Sofie; Mygind, Per
Den.

PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 115 pp.
CODEN: PIXXD2

DOCUMENT TYPE:

Patent
English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9858953	A2	19981230	WO 1998-DK266	19980619
WO 9858953	A3	19990318		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU,
ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9880119 A1 19990104 AU 1998-80119 19980619

EP 1007685 A2 20000614 EP 1998-928179 19980619

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

BR 9810288 A 20000919 BR 1998-10288 19980619

PRIORITY APPLN. INFO.: DK 1997-744 A 19970623

WO 1998-DK266 W 19980619

AB Members of a gene family from the human respiratory pathogen *Chlamydia pneumoniae* that encode surface exposed membrane proteins of a size of approx. 89-101 kDa and of 56-57 kDa, preferably about 89.6-100.3 kDa and about 56.1 kDa are cloned and characterized. The genes and gene products can be used in the diagnosis, pathol. and epidemiol. of *C. pneumoniae* and in vaccines. Genes were cloned by screening an expression library with antiserum to *Chlamydia* outer membrane complexes.

IT 219303-77-2 219303-79-4 219303-81-8

219303-84-1 219303-92-1 219304-14-0

219304-16-2 219304-18-4 219304-20-8

219304-22-0 219304-26-4

RL: BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)

(amino acid sequence; **outer membrane
proteins of *Chlamydia pneumoniae* and genes
encoding them and their diagnostic and therapeutic uses)**)

IT 219303-76-1 219303-78-3, DNA (*Chlamydia
pneumoniae* gene omp5) 219303-80-7 219303-83-0,
DNA (*Chlamydia pneumoniae* gene omp7)

219303-91-0, DNA (*Chlamydia pneumoniae* gene
omp8) 219304-12-8, DNA (*Chlamydia pneumoniae*
gene omp9) 219304-15-1, DNA (*Chlamydia*

pneumoniae gene omp10) 219304-17-3, DNA (
Chlamydia pneumoniae gene omp11) 219304-19-5,
DNA (*Chlamydia pneumoniae* gene omp12)

219304-21-9, DNA (*Chlamydia pneumoniae* gene
omp13) 219304-23-1, DNA (*Chlamydia pneumoniae*
gene omp14) 219304-27-5, DNA (*Chlamydia*

pneumoniae gene omp15) 219304-28-6, DNA (
Chlamydia pneumoniae gene omp15)

RL: BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)

(nucleotide sequence; **outer membrane
proteins of *Chlamydia pneumoniae* and genes
encoding them and their diagnostic and therapeutic uses)**)

L15 ANSWER 21 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:752291 HCAPLUS

DOCUMENT NUMBER: 130:10609

TITLE: Diagnosis and management of infection caused by
Chlamydia

INVENTOR(S): Mitchell, William M.; Stratton, Charles W.

PATENT ASSIGNEE(S): Vanderbilt University, USA

SOURCE: PCT Int. Appl., 139 pp.

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9850074	A2	19981112	WO 1998-US9237	19980506
WO 9850074	A3	19990819		
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 2001002421	A1	20010531	US 1998-25176	19980218
US 6258532	B1	20010710		
AU 9872899	A1	19981127	AU 1998-72899	19980506
EP 981372	A2	20000301	EP 1998-920292	19980506
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.:

US 1997-45689	P	19970506
US 1997-45739	P	19970506
US 1997-45779	P	19970506
US 1997-45780	P	19970506
US 1997-45784	P	19970506
US 1997-45787	P	19970506
US 1997-911593	A	19970814
US 1998-25176	A2	19980218
US 1998-25521	A2	19980218
US 1998-25174	A	19980218
WO 1998-US9237	W	19980506

AB A combination of agents directed toward various stages of the chlamydial life cycle is effective in substantially reducing infection. These include agents targeted against the cryptic phase (e.g. nitroarom. compds.), elementary body phase (e.g. disulfide reducing agents), and replicating phase, probenecid, and antiporphyrin agents. **Chlamydia**-free cell lines and animals can be obtained, and **Chlamydia** infections can be treated, by use of .gtoreq.2 such agents. **Chlamydia** infections may be diagnosed or monitored by immunoassays (e.g. ELISA or antigen capture assay) for the cysteine-rich major **outer membrane protein** or for specific antigenic peptides, DNA amplification assays (e.g. PCR) for chlamydial genes, and Western blot assays. Thus, a multiple sclerosis patient showing progressive limb impairment was diagnosed with C. **pneumoniae** infection by cerebrospinal fluid PCR and culture; treatment with rifampin (300 mg twice a day for 2 mo against the elementary body/reticulate body transition), flagyl (500 mg twice a day for 5 mo against the stationary phase reticulate body), and ofloxacin (for 2 mo) and Bactrim (double strength twice a day) and levaquin (500 mg/day) for 5 mo against the replicating reticulate body resulted in marked

improvement in all aspects of neurol. function and an ability to return to work and routine athletic activities.

L15 ANSWER 22 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:71227 HCAPLUS

DOCUMENT NUMBER: 128:137176

TITLE: Cloning and expression of major **outer**

membrane protein gene of

Chlamydia for immunization against infections

INVENTOR(S): Brunham, Robert C.

PATENT ASSIGNEE(S): University of Manitoba, Can.; Brunham, Robert C.

SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9802546	A2	19980122	WO 1997-CA500	19970711
WO 9802546	A3	19980226		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
CA 2259595	AA	19980122	CA 1997-2259595	19970711
AU 9734314	A1	19980209	AU 1997-34314	19970711
AU 723235	B2	20000824		
EP 915978	A2	19990519	EP 1997-930277	19970711
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
JP 2000503325	T2	20000321	JP 1998-505478	19970711
PRIORITY APPLN. INFO.:			US 1996-21607 P	19960712
			WO 1997-CA500 W	19970711

AB **Nucleic acids**, including DNA, immunization to generate a protective immune response in a host, including humans, to a major **outer membrane protein** of a strain of **Chlamydia trachomatis**, preferably contains a nucleotide sequence encoding a major **outer membrane protein** (MOMP) or a N-terminal MOMP fragment that generates **antibodies** that specifically react with MOMP and a promoter sequence operatively coupled to the first nucleotide sequence for expression of the MOMP in the host. Plasmid vectors such as pcdNA3 are prepd. which also contain gene regulatory elements such as the human cytomegalovirus promoter. The non-replicating vector may be formulated with a pharmaceutically-acceptable carrier for in vivo administration (intranasal) to the human host.

L15 ANSWER 23 OF 26 HCAPLUS COPYRIGHT 2001 ACS

M. Smith 308-3278

ACCESSION NUMBER: 1997:36422 HCAPLUS
DOCUMENT NUMBER: 126:70785
TITLE: Differentiation of Chlamydia psittaci and C. pecorum strains by species-specific PCR
AUTHOR(S): Sheehy, Noreen; Markey, Bryan; Gleeson, Mary; Quinn, P. Joseph
CORPORATE SOURCE: Department of Veterinary Microbiology and Parasitology, Faculty of Veterinary Medicine, University College Dublin, Dublin, 4, Ire.
SOURCE: J. Clin. Microbiol. (1996), 34(12), 3175-3179
CODEN: JCMIDW; ISSN: 0095-1137
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Sequence analyses of the 5' ends of the 60-kDa cysteine-rich **outer membrane protein** genes (Omp2) of **Chlamydia psittaci** and **C. pecorum** strains indicate that these species have .apprx.70% nucleotide identity. On the basis of this sequence information, PCR primers were designed to allow the specific amplification of DNA extd. from **C. psittaci** S26/3 (abortion strain), P94/1 (pigeon strain), and **C. pecorum** W73 (fecal strain) in one reaction tube. By using nested reactions (with primers PCR-D1 and PCR-D2 followed by the specific primers and PCR-D2), 0.6, 0.2, and 8 inclusion-forming units of S26/3, P94/1 (both dild. in tissue culture-neg. placental material), and W73 (dild. in culture-neg. fecal material) per mL, resp., were detected. The differentiation of **C. psittaci** and **C. pecorum** strains of ovine and bovine origins was carried out, and the results were in agreement with those obtained from AluI restriction enzyme anal. of DNA amplified from corresponding strains by PCR. This approach allows the simultaneous detection and typing of **C. psittaci** and **C. pecorum** strains and the identification of samples contg. both species.

L15 ANSWER 24 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:743040 HCAPLUS
DOCUMENT NUMBER: 123:332083
TITLE: Single stranded DNA oligonucleotide and its application in a PCR method of diagnosis of Chlamydia trachomatis.
INVENTOR(S): Bebear, Christiane; Rzberg, Max
PATENT ASSIGNEE(S): Organics Ltd., Israel
SOURCE: Israeli, 25 pp.
CODEN: ISXXAQ
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IL 94940	A1	19950315	IL 1990-94940	19900702

AB A single stranded DNA oligonucleotide consists of the 5' ATTACGTGAGCAGCTCTCAT 3' designated as CT5. A method, for diagnosis of **Chlamydia trachomatis**, comprises obtaining a sample of **Chlamydia trachomatis**; hybridizing a first and second single

stranded DNA oligonucleotide according to claim 1 with the sample wherein the first single stranded DNA oligonucleotide comprises the sequence of claim 1 and wherein the second single stranded DNA oligonucleotide comprises a DNA sequence coding for a portion of the major **outer membrane protein** (MOMP), amplifying by an enzymic reaction the **Chlamydia** trachomatis DNA sequences which hybridize to the first and second single stranded oligonucleotide sequences and the region between them, and detecting the amplified DNA sequences. The first single stranded DNA oligonucleotide is the sequence 5' ATTTACGTGAGCAGCTCTCTCAT 3'. The second single stranded DNA comprises the sequence 5' GCCGCTTTGAGTTCTGCTTCCTC 3' designated CT1. Amplification by an enzymic reaction is performed by TaqI DNA polymerase enzyme. The amplified DNA sequences are identified by gel electrophoresis and then hybridized with sulfonated DNA probes. A **monoclonal antibody** recognizing the labeled DNA was also obtained and used to visualize the DNA.

L15 ANSWER 25 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1993:663642 HCAPLUS

DOCUMENT NUMBER: 119:263642

TITLE: A transcriptionally amplified DNA probe assay with

ligatable probes and immunochemical detection

AUTHOR(S): Carpenter, William R.; Schutzbank, Ted E.; Tevere, Vincent J.; Tocyloski, Kenneth R.; Dattagupta, Nanibushan; Yeung, Kwok K.

CORPORATE SOURCE: Diagn. Div., Miles Inc., Tarrytown, NY, 10591, USA

SOURCE: Clin. Chem. (Washington, D. C.) (1993), 39(9), 1934-8

CODEN: CLCHAU; ISSN: 0009-9147

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Transcriptionally amplified DNA probes are valuable tools in the development of sensitive **nucleic acid**-based diagnostic assays. Here the authors describe a model assay using a novel oligonucleotide hairpin probe that encodes a T7 RNA polymerase promoter. The hairpin probe and an adjacently hybridizing biotinylated capture probe were hybridized to target DNA and the duplex was captured onto streptavidin-coated magnetic particles. After ligation of the immobilized probes, which served to maintain specificity, the hairpin probe was transcribed by T7 RNA polymerase. The amplified RNA product was hybridized to the capture probe and bound to the streptavidin-coated magnetic particles. The immobilized heteroduplex was detected with an **antibody**-alk. phosphatase conjugate specific for DNA:RNA hybrids, and the chemiluminescent substrate adamantyl-1,2-dioxetane Ph phosphate. Ten attomoles of target DNA could be detected in a background of 5 .mu.g of unrelated DNA. The chemiluminescent immunoassay was as sensitive as radioactive detection of specific product after gel electrophoresis.

L15 ANSWER 26 OF 26 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1987:552683 HCAPLUS

DOCUMENT NUMBER: 107:152683

TITLE: **Chlamydia** major outer membrane protein

INVENTOR(S): Agabian, Nina; Stephens, Richard; Kuo, Cho Chou; Mullenbach, Guy T.

PATENT ASSIGNEE(S): Chiron Corp., USA; University of Washington
 SOURCE: Eur. Pat. Appl., 31 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 192033	A2	19860827	EP 1986-100279	19860110
EP 192033	A3	19880504		
EP 192033	B1	19960925		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 143414	E	19961015	AT 1986-100279	19860110
US 5770714	A	19980623	US 1995-466814	19950606
US 5821055	A	19981013	US 1995-468451	19950606
US 6030799	A	20000229	US 1995-466152	19950606
PRIORITY APPLN. INFO.:			US 1985-692001	19850114
			US 1986-818523	19860113
			US 1991-691639	19910425
			US 1993-144095	19931028

AB Polypeptide compns. having immunol. activity corresponding to that of a major outer membrane protein (MOMP) of C. trachomatis are produced by expressing a chimeric DNA construct encoding at least a portion of the MOMP under the control of a regulatory system recognized by a unicellular expression host. The polypeptides are useful as diagnostic agents and vaccines. Thus, partially digested chlamydial DNA was inserted into .lambda.gtl1, the recombinant phage was cultivated in Escherichia coli, and colonies were screened with **monoclonal antibodies** for clones producing recombinant MOMP polypeptides. The amino acid sequence and corresponding DNA sequence for MOMP are presented.

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L1 510 SEA FILE=REGISTRY OUTER MEMBRANE PROTEIN?/CN
 L2 30 SEA FILE=REGISTRY NUCLEIC ACID?/CN
 L3 98 SEA FILE=REGISTRY ANTIBOD?/CN
 L5 1 SEA FILE=REGISTRY ANTIBOD?(L) POLYCLONAL?
 L6 521 SEA FILE=REGISTRY ("CHLAMYDIA TRACHOMATIS MAJOR OUTER MEMBRANE PROTEIN FRAGMENT"/CN OR "CHLAMYDIA TRACHOMATIS MJOR OUTER MEMBRANE PROTEIN HELPER T CELL EPITOPE"/CN) OR L1
 L7 4972 SEA FILE=REGISTRY CHLAMYDIA(L) PNEUMONIAE NOT L6
 L8 7910 SEA FILE=HCAPLUS L6 OR (OUTER(W)MEMBRANE?) (5A) PROTEIN? OR OMP
 L9 25882 SEA FILE=HCAPLUS L7 OR CHLAMYDIA OR PNEUMONI?
 L10 658 SEA FILE=HCAPLUS L8(L) L9
 L11 621758 SEA FILE=HCAPLUS L5 OR ANTIBOD? OR L3 OR POLYCLONAL OR PAB# OR MAB# OR AB# OR MONOCLONAL
 L13 309 SEA FILE=HCAPLUS L10 AND L11
 L14 112454 SEA FILE=HCAPLUS NUCLEIC(W)ACID? OR L2
 L15 26 SEA FILE=HCAPLUS L13 AND L14
 L16 212985 SEA FILE=HCAPLUS (DIAG? OR THERAP? OR IDENT? OR DETN OR

DETECT? OR DETERM?) (L) SEQUENCE?
L18 41 SEA FILE=HCAPLUS (L13 AND L16) NOT L15
L19 27060 SEA FILE=HCAPLUS (DIAG? OR THERAP?) (L) SEQUENCE?
L20 13 SEA FILE=HCAPLUS L18 AND L19

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L20 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:581736 HCAPLUS
DOCUMENT NUMBER: 135:170779
TITLE: Porin B (PorB) as a therapeutic target for prevention
and treatment of infection by Chlamydia
INVENTOR(S): Stephens, Richard S.; Kubo, Aya
PATENT ASSIGNEE(S): Regents of the University of California, USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001056605	A1	20010809	WO 2001-US3462	20010201
W: AU, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				
PT, SE, TR				

PRIORITY APPLN. INFO.: US 2000-179592 P 20000201

AB The present invention features the use of PorB polypeptide as a therapeutic agent. In specific embodiment the invention features a chlamydial vaccine based on a PorB polypeptide, as well as methods for induction of a protective immune response against infection by Chlamydia and Chlamydiophila. The invention further features methods for identifying agents that offset PorB function (e.g., in transport of .alpha.-ketoglutarate) and which are effective as anti-chlamydial chemotherapeutic agents.

IT 215108-09-1

RL: PRP (Properties)

(unclaimed protein **sequence**; porin B (PorB) as a
therapeutic target for prevention and treatment of infection by
Chlamydia)

REFERENCE COUNT: 3

REFERENCE(S): (1) Allen; J Immunol 1991, V147, P674 HCAPLUS
(2) Wyllie; FEBS Letters 1999, V445, P192 HCAPLUS
(3) Wyllie; Infection and Immunity 1998, V66(11),
P5202 HCAPLUS

L20 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:842286 HCAPLUS
DOCUMENT NUMBER: 134:14041
TITLE: Protein and DNA **sequences** of Moraxella
genes, BASB103, BASB104, BASB105, BASB106, BASB107 and
BASB108, and their uses in **diagnosis** and

INVENTOR(S): vaccination
Thonnard, Joelle
PATENT ASSIGNEE(S): SmithKline Beecham Biologicals S.A., Belg.
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000071724	A2	20001130	WO 2000-EP4618	20000518
WO 2000071724	A3	20010215		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
GB 1999-12038 A 19990524
GB 1999-12040 A 19990524
GB 1999-12674 A 19990601
GB 1999-12705 A 19990601
GB 1999-12838 A 19990602
GB 1999-13354 A 19990608

AB The invention provides protein and DNA **sequences** of Moraxella catarrhalis genes, BASB103, BASB104, BASB105, BASB106, BASB107 and BASB108 and their encoding proteins, and methods for producing such proteins by recombinant techniques. BASB104 of Moraxella catarrhalis is related by amino acid **sequence** homol. to Salmonella typhimurium **outer membrane protein** ApeE. BASB106 of Moraxella catarrhalis is related by amino acid **sequence** homol. to Klebsiella **pneumoniae** OmpK35 porin. BASB107 of Moraxella catarrhalis is related by amino acid **sequence** homol. to Escherichia coli FhuE receptor precursor. BASB108 of Moraxella catarrhalis is related by amino acid **sequence** homol. to Vibrio cholerae heme receptor hutA. BASB103 and BASB105 of Moraxella catarrhalis have some features of **outer membrane protein**: signal **sequence**, arom. amino acid N-terminal, high beta-strand 2D structure prediction. Also provided are **diagnostic**, prophylactic and **therapeutic** uses.

L20 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:688466 HCAPLUS

DOCUMENT NUMBER: 133:249334

TITLE: Methods and reagents for the diagnosis and treatment of multiple sclerosis caused by Chlamydia

INVENTOR(S): Stratton, Charles W.; Mitchell, William M.; Yao, Song-yi; Bannan, Jason D.; Ljunggren-Rose, Asa; Sriram, Subramaniam

PATENT ASSIGNEE(S): Vanderbilt University, USA
SOURCE: PCT Int. Appl., 102 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000057187	A2	20000928	WO 2000-US7226	20000317
WO 2000057187	A3	20010419		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 1999-125598 P 19990319
US 2000-176662 P 20000118
US 2000-176784 P 20000118
US 2000-176940 P 20000118

AB The invention features methods and reagents for the diagnosis, monitoring, and treatment of multiple sclerosis. The invention is based in part on the discovery that Chlamydia is present in patients with multiple sclerosis, and that anti-chlamydial agents improve or sustain neurol. function in these patients.

L20 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:291072 HCAPLUS

DOCUMENT NUMBER: 132:307249

TITLE: Chlamydia antigens and corresponding DNA fragments and their uses for diagnosis and treatment of Chlamydia infection

INVENTOR(S): Murdin, Andrew D.; Oomen, Raymond P.; Wang, Joe

PATENT ASSIGNEE(S): Connaught Laboratories Limited, Can.

SOURCE: PCT Int. Appl., 226 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000024765	A2	20000504	WO 1999-CA992	19991028
WO 2000024765	A3	20001109		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,

SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1129202 A2 20010905 EP 1999-955602 19991028

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

US 1998-106034 P 19981028
US 1998-106039 P 19981028
US 1998-106042 P 19981028
US 1998-106044 P 19981028
US 1998-106072 P 19981029
US 1998-106073 P 19981029
US 1998-106074 P 19981029
US 1998-106087 P 19981029
US 1998-106587 P 19981102
US 1998-106588 P 19981102
US 1998-106589 P 19981102
US 1998-107034 P 19981102
US 1998-107035 P 19981102
WO 1999-CA992 W 19991028

AB The present invention provides purified and isolated polynucleotide mols.
that encode 13 Chlamydia pneumoniae polypeptides which can be used in
methods to prevent, treat, and **diagnose** Chlamydia infection.
The nucleotide and deduced amino acid **sequences** of the 13 genes
and proteins are provided.

IT 223708-70-1

RL: BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use);
BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(amino acid **sequence**; Chlamydia antigens and
corresponding DNA fragments and their uses for **diagnosis** and
treatment of Chlamydia infection)

L20 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:191222 HCAPLUS

DOCUMENT NUMBER: 132:232744

TITLE: BASB033 genes and proteins from Neisseria meningitidis
and their use in diagnosis and for vaccination

INVENTOR(S): Ruelle, Jean-louis

PATENT ASSIGNEE(S): Smithkline Beecham Biologicals S.A., Belg.

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000015801	A1	20000323	WO 1999-EP6718	19990909
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,			

M. Smith 308-3278

MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9958622 A1 20000403 AU 1999-58622 19990909
EP 1112366 A1 20010704 EP 1999-946160 19990909

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:

GB 1998-20003 A 19980914
WO 1999-EP6718 W 19990909

AB The invention provides BASB033 proteins and genes and methods for producing such proteins by recombinant techniques. Also provided are **diagnostic**, prophylactic and **therapeutic** uses. The BASB033 protein from the ATCC13090 strain showed significant similarity (35% **identity** in a 292 amino acid overlap) with the *Klebsiella pneumoniae* outer membrane phospholipase A **protein**. The BASB033 protein for the H44/76 strain displayed .apprx.99% **sequence identity** with that of the ATCC13090 strain. The protein was produced with recombinant *E. coli* and used to immunize mice. Almost all *N. meningitidis* serogroup B strain tested reacted with the **antibodies** produced by these mice. Anti-BASB033 **antibodies** were found in sera of convalescent patients. The promoter region of the BASB033 gene was cloned and **sequenced**.

REFERENCE COUNT: 1

REFERENCE(S): (1) Inst Nat Sante Rech Med; WO 9802547 A 1998 HCAPLUS

L20 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:106618 HCAPLUS

DOCUMENT NUMBER: 132:165113

TITLE: Soluble fusion **protein** of *Chlamydia*

trachomatis major **outer membrane protein** (MOMP) and hydrophilic portion of bovine serum albumin (BSA) and detection of *Chlamydia trachomatis* infection

INVENTOR(S): Shimizu, Hideharu; Ogawa, Hiroyuki; Kawaguchi, Hiroshi; Ishii, Yoshiyuki

PATENT ASSIGNEE(S): Denki Kagaku Kogyo K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000041678	A2	20000215	JP 1998-213212	19980728

AB Sol. fusion **protein** of *Chlamydia trachomatis* major **outer membrane protein** (MOMP) and hydrophilic portion of bovine serum albumin (BSA), usable as antigen for *Chlamydia trachomatis* infection diagnosis, their cDNAs, method of

their recombinant prodn., anti-**Chlamydia** trachomatis antibody detection methods, and reagent kits are provided. Fusion proteins were expressed in E. coli and sf9 cells. Using the recombinant fusion proteins as antigens, **Chlamydia** trachomatis infection was detected in serum samples of infants diagnosed with infant **Chlamydia pneumonia** by enzyme immunoassay (EIA), in both antibody capture and antigen solid phase methods.

L20 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:34933 HCAPLUS

DOCUMENT NUMBER: 130:94474

TITLE: Chlamydia trachomatis specific peptides and their use in diagnostic assays

INVENTOR(S): Ohana, Bella

PATENT ASSIGNEE(S): Savyon Diagnostics Ltd., Israel

SOURCE: PCT Int. Appl., 78 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9900414	A1	19990107	WO 1998-IL276	19980615
W:				
AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9877861	A1	19990119	AU 1998-77861	19980615
EP 991662	A1	20000412	EP 1998-925908	19980615
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			IL 1997-121115	19970619
			WO 1998-IL276	19980615

AB Peptides or a mixt. of peptides derived from the variable domains of the **Chlamydia** trachomatis (C. trachomatis) immunodominant major outer membrane protein (MOMP), said peptides or mixts. of peptides characterized by having specificity only to C. trachomatis anti-MOMP antibodies and being non-cross reactive with anti-MOMP antibodies of other **Chlamydia** species. The peptides are selected from (a) peptide 4A having the amino acid sequence: IFDTTLNPTIAGAGDVK; (b) peptide 4B having the amino acid sequence: VDITTLNPTIAGCGSVAK; (c) peptide 4C having the amino acid sequence: CVFDVTTLNPTIAGAGDVK; (d) peptide 4D having the amino acid sequence: LAEAILDVTTLNPTITGKAVVSK; (e) peptide C.t2A having the amino acid sequence: CDNENQSTVK TSVPNMSLDQSK; (f) peptide C.t VDI having the amino acid sequence: VAGLENDPTTNVARA; (g) peptide C.t VDII having the amino acid sequence: DNENNATVSDSKLVPNHMSDQS; (i) peptide C.t VDIV having the amino acid sequence: LDVTTNATIAGKGTVV; and (i) analogs of any one of peptides

(a)-(h).

REFERENCE COUNT: 6
REFERENCE(S): (1) Hitachi Chemical Co Ltd; EP 0456524 A 1991 HCAPLUS
(2) Meiji Milk Prod Co Ltd; WO 9607910 A 1996 HCAPLUS
(3) United Biomedical Inc; WO 9511998 A 1995 HCAPLUS
(4) Us Dep Health & Human Service; NTIS Application
Number US7324664 1989
(5) Us Health; WO 9406827 A 1994 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:9858 HCAPLUS
DOCUMENT NUMBER: 130:65242
TITLE: Chlamydia pneumoniae specific peptides and their use
in diagnostic assays
INVENTOR(S): Ohana, Bella
PATENT ASSIGNEE(S): Savyon Diagnostics Ltd., Israel
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9857981	A2	19981223	WO 1998-IL277	19980615
WO 9857981	A3	19990311		
W:		AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
RW:		GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG		
IL 121114	A1	20010319	IL 1997-121114	19970619
AU 9877862	A1	19990104	AU 1998-77862	19980615
EP 1012182	A2	20000628	EP 1998-925909	19980615
R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI		

PRIORITY APPLN. INFO.: IL 1997-121114 A 19970619
WO 1998-IL277 W 19980615

AB A peptide derived from the variable domain of *C. pneumoniae* major outer membrane protein (MOMP), for use in the diagnosis of *C. pneumoniae* infections, said peptide comprises between 9-40 amino acids and being able to react with antibodies formed during infection with *C. pneumoniae*, further characterized by having essentially very low cross-reactivity towards antibodies against other *Chlamydia* species. Thus, peptides were synthesized and *C. pneumoniae*-specific peptides were selected for differentiating infections by *C. pneumoniae* from *C. trachomatis*, *C. psittaci*, and *C. precorum*.

L20 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:586027 HCAPLUS
 DOCUMENT NUMBER: 129:259405
 TITLE: Recombinant preparation of **Chlamydia**
 trachomatis major **outer membrane**
proteins and use for determination of
antibodies to the proteins
 INVENTOR(S): Ogawa, Hiroyuki; Ishii, Yoshiyuki; Shimizu, Hideharu
 PATENT ASSIGNEE(S): Denki Kagaku Kogyo K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10234395	A2	19980908	JP 1997-40780	19970225

AB The genes encoding major outer membrane protein (MOMP) of *C. trachomatis* serum type L2, C, G, D, and H are isolated and used for recombinant prepn. of the MOMP in transgenic cells such as Sf9 insect cells or *Escherichia coli*. Prepn. of the MOMP-immobilized microplate and highly-specific detection of *C. trachomatis* in patient sera using the microplate were shown. Methods and reagents contg. MOMP for detecting the **antibodies** to *C. trachomatis* are claimed.

L20 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:121894 HCAPLUS
 DOCUMENT NUMBER: 122:152496
 TITLE: Ligase chain reaction to detect *Chlamydia trachomatis* infection of the cervix
 AUTHOR(S): Schachter, Julius; Stamm, Walter E.; Quinn, Thomas C.;
 Andrews, William W.; Burczak, John D.; Lee, Helen H.
 CORPORATE SOURCE: Department of Laboratory Medicine, University of
 California, San Francisco, CA, 94110, USA
 SOURCE: J. Clin. Microbiol. (1994), 32(10), 2540-3
 CODEN: JCMIDW; ISSN: 0095-1137
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The authors performed a multicenter evaluation of ligase chain reaction (LCR) in the **diagnosis** of **Chlamydia trachomatis** infection of the cervix. LCR provides an amplification of target **sequences** within the chlamydial cryptic plasmid. The LCR results were compared with those of isolation in cell culture. Discrepant (tissue culture-neg. and LCR-pos.) test results were resolved by the application of a direct immunofluorescent-**antibody** test to **detect** chlamydial elementary bodies and by the use of alternate DNA primers that targeted the chlamydial major **outer membrane protein** gene. A total of 234 of 2,132 specimens (10.9%) could be confirmed as contg. *C. trachomatis*. Of these, 152 were **detected** by isolation in cell culture and 221 were **detected** by LCR. The corresponding sensitivities were 94% for LCR and 65% for cell culture. There was greater variability among study site results for cell culture

sensitivity (52 to 92%) than for LCR sensitivity (87 to 98%). The specificity of each test was greater than 99.9%. Thus, LCR offers a highly sensitive nonculture method for **detecting** chlamydial infection of the cervix.

L20 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1993:78806 HCAPLUS

DOCUMENT NUMBER: 118:78806

TITLE: Evaluation of the humoral immune response in trachoma to **Chlamydia trachomatis** major **outer membrane proteins** by

AUTHOR(S): Jones, H. Martin; Schachter, Julius; Stephens, Richard S.

CORPORATE SOURCE: Dep. Pharm. Chem., Univ. California, San Francisco, CA, USA

SOURCE: J. Infect. Dis. (1992), 166(4), 915-19
CODEN: JIDIAQ; ISSN: 0022-1899

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The **Chlamydia trachomatis** immunodominant major **outer membrane protein** (MOMP) is both a target of neutralizing **antibodies** and the serotyping antigen and thus has been a focus of **diagnostic**, seroepidemiol., and exptl. investigations. The microimmunofluorescence (MIF) test has been the principal tool in serol. investigations of chlamydial infections but is difficult and expensive for routine use; moreover, since it uses whole organisms as antigen, it is incapable of revealing the mol. specificity of the humoral response to infection. These limitations were resolved by using synthetic peptides corresponding to serovar-specific antigenic regions of MOMP in an ELISA-based format to analyze the serospecificity of sera from trachoma cases. The ELISA reaction to the surface-exposed MOMP **sequence** variable segment 1 was immunodominant and serovar-specific and was in concordance with serovar specificity according to paired MIF test detns. Understanding the patterns of humoral responses to MOMP **determinants** in patient populations will advance knowledge of their role in the immunobiol. of naturally acquired infection.

L20 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1991:599827 HCAPLUS

DOCUMENT NUMBER: 115:199827

TITLE: Genetic diversity and identification of human infection by amplification of the chlamydial 60-kilodalton cysteine-rich outer membrane protein gene

AUTHOR(S): Watson, M. W.; Lambden, P. R.; Clarke, I. N.

CORPORATE SOURCE: Med. Sch., Univ. Southampton, Southampton, SO9 4XY, UK

SOURCE: J. Clin. Microbiol. (1991), 29(6), 1188-93
CODEN: JCMIDW; ISSN: 0095-1137

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The 60-kDa cysteine-rich **outer membrane protein** (CrP) genes of **Chlamydia psittaci**, **Chlamydia pneumoniae**, and **Chlamydia**

trachomatis have very different 5' ends, but two area flanking this variable region show **abs. sequence** conservation. This observation permitted differentiation of the three species of **Chlamydia** by the polymerase chain reaction (PCR), forming the basis of a **diagnostic** test for chlamydial infections. The PCR product contg. the variable region of the resp. 60-kDa CrP genes was also subjected to restriction endonuclease digestion, enabling differentiation of individual type strains of *C. psittaci*. Differentiation was possible between lymphogranuloma venereum and trachoma isolates of *C. trachomatis*. The PCR-based **diagnostic** test was successful with all strains of chlamydiae studied. The PCR primers showed high specificity and did not product any product with common bacterial pathogens that may share the same sites of infection.

L20 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1989:206783 HCAPLUS

DOCUMENT NUMBER: 110:206783

TITLE: Nucleotide and deduced amino acid sequences for the four variable domains of the major **outer membrane proteins** of the 15

Chlamydia trachomatis serovars
AUTHOR(S): Yuan, Ying; Zhang, Youxun; Watkins, Nancy G.; Caldwell, Harlan D.

CORPORATE SOURCE: Rocky Mountain Lab., Natl. Inst. Allergy Infect. Dis., Hamilton, MT, 59840, USA

SOURCE: Infect. Immun. (1989), 57(4), 1040-9
CODEN: INFIBR; ISSN: 0019-9567

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The amino acid **sequences** of major outer membrane proteins (MOMPs) from *C. trachomatis* serovars A, B, C, L1, and L2 are predominantly conserved but have four variable domains (VDs) in which major neutralizing and serotyping antigenic **determinants** are located. Because these MOMP VDs are primarily responsible for antigenic differences between serovars and are assocd. with important immunol. and biol. properties, studies were focused on defining these **sequences** within the MOMPs of all 15 *C. trachomatis* serovars. Oligonucleotide primer extension sequencing of MOMP mRNA was used to det. the nucleotide and deduced amino acid **sequences** of the four MOMP VDs of the 15 *C. trachomatis* serovars. Comparative amino acid **sequence** homologies of all four domains sepd. the serovars into three groups: group 1, serovars B, Ba, D, E, L1, and L2; group 2, serovars G and F; and group 3, serovars A, C, H, I, J, K, and L3. Hydrophilicity and charge values for each domain were detd. The MOMP VDs of given serovars with the greatest total hydrophilicity and charge values were found to be the location of antigenic **determinants** recognized by MOMP-specific **monoclonal antibodies**. These findings should be useful for predicting MOMP antigenic **determinants** and testing the antigenic properties of these VDs by using synthetic peptides corresponding to each MOMP VD. The potential usefulness of the VD **sequence** information is discussed in relation to the development of defined synthetic peptides and oligonucleotides that may be used to develop new serol. and **diagnostic** assays for *C. trachomatis* infections.